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PROBLEMS OF STRUCTURE AND TERRITORIAL DISTRIBUTION OF INDUSTRY

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PROBLEMS OF STRUCTURE AND TERRITORIAL DISTRIBUTION OF INDUSTRY

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1. The proportional development of the national economy requires the establishment of some just proportions between various branches of industry, as well as the establishment of corresponding proportions in the complex development of all regions, by a rational distribution of the forces of production all over the territory of our country. The proportions reported to territory ensure one of the fundamental equilibriums which condition the general economic development. For this very reason, within a planned economy - where the problem has best conditions of settlement - the carrying out of some just proportions reported to territory represents one of the main objectives of the policy of industrialization. At the same time, one must have in view that there is a mutual interdependence between the two groups of proportions - proportions on the national economy and proportions reported to territory; that is why we consider that some problems of territorial distribution of industry can be analysed only in accordance with some proportions of the economy which determines them.

2. Thus in Rumania, in order to create an adequate structure of industry, the ensurance of certain proportions was consistently pursued, the most important of which are the following:

a) The proportion between the production of the branches producing means of production and the production of the branches producing consumer goods.

i) The achievement of correct proportions between these groups of branches was obtained by the priority growth of the production of the means of production as against the increase of the production of consumer goods. The priority development of the branches producing means of production and first of all the heavy industry and its pivot, the machine-building industry, has ensured the country's industrialization, the introduction of technical progress all over our economy, the consistent achievement of the process of large-scale reproduction, the raising and improvement of production, the superior turning to good account of the national wealth and the permanent increase in the people's living standard.

ii) Following this line in ensuring a just proportion between the two groups of branches, Rumania has developed the industry producing means of production at a more rapid rate that the production of consumer goods. This explains the fact that, while the production of the means of production increased in 1961 by nearly 7.8 times, compared with 1938, the

production of consumer goods increased over 4 times.

iii)The production of the machine-building and metal processing branch, the central pivot of the heavy industry, was in 1961 13 times bigger than in 1938.

iv) The priority increase of the heavy industry brought about the improvement of the proportions between the two groups of production .

v) The evolution of the structure of overall production on groups of production, is as follows:

- in % -

Groups of production	1938	1948	1950	1961
a. The production of the means of production	45.5	49.4	53.0	60.9
b. The production of consumer goods	54.5	50.6	47.0	39.1

vi) The plan of developing the economy of the Rumanian People's Republic for the years 1960 - 1965 provides for the further priority increase of the output means of production, which will ensure a 2.2 times growth of the output of the means of production by 1965, as compared with 1959 and the growth by about twice of the production of the consumer goods industry.

b) The proportion between the branches of the extraction industry and the branches of the processing industry. The establishment of some adequate proportions between these groups of branches ensures in addition to the continuous development of production , a rhythmic activity in the utilization of the production capacities and of the labour force.

c) The proportion between the output of electric power and the production of other branches of industry. Economic experience shows that the development of the production of electric power must go ahead the other branches of industry in order to be able to satisfy the electric requirements of the other branches and to ensure the continuous introduction of new technique in production by electrification, mechanization and automation of the processes of production.

i) As compared with 1938, in 1961 the output of electric and thermic power was 12 times bigger, an increase much superior to the increase of production all over the industry in the same period of time.

ii) The programme of development of the national economy for the next 15 years takes into account this proportion, so that at a 6 times increase of the industrial production, the output of electric power will grow 10 times.

3. Parallel with the ensurance of a just proportion in the development of the various branches of industry, a correct territorial distribution of the forces of production must be concurrently ensured. Rumania's economic development is therefore also based on the achievement of a change in the territorial distribution of the forces of production so that the economic development of all regions should be ensured, with a view to obtaining a general economic impetus.

4. The ensurance of this proportionality in the territorial distribution of production leads to the more rational turning to good account of the natural wealth in all regions of the country, to the raising of the social

productivity of labour and to the ensuring of the economic, social and cultural impetus of the entire country.

5. The planned territorial distribution of production, which takes into account the requirements of the development of the entire national economy and the economic, social and natural conditions of each region has first of all in view the getting nearer of production to the base of raw materials and power resources, as well as to the consumption centres of the respective products. This results in the ever more complete and many-sided utilization of the natural wealth and of the labour force resources, the growth of social labour productivity consequently with the creation of the possibilities of passing to the processing of raw materials through all processing stages, up to the finite product by the liquidation of irrational transport and at great distances. At the same time the territorial distribution of production has in view the planned territorial division of labour between regions and the complex, many-sided development of their economy. The economic specialization of some regions results in the extension of economic cooperation among them, the development of ever more complex relations among the regions.

6. The general development of economy and within it, the large scale reproduction represent a unique process which influences and is influenced in its turn by the territorial distribution of the forces of production.

7.a) The spontaneous territorial distribution of the forces of production leads to the creation of some disproportions in the economic development of the country and at the same time influences in a negative way the development of economy as a whole. Many and sometimes important material and labour resources thus remain unutilized in economy; the social productivity of labour is under the real possibilities of economy; the production expenses and the investments are bigger compared with those objectively necessary.

b) The anarchic character of the territorial distribution of the forces of production is reflected in the parallel existance of some powerfully industrialized centres alongside whole regions, which often have no industrial units, confined to agricultural activity, often rudimentary, with negative consequences on the people's living standard, on the sanitary and cultural situation, etc.

c) The absence of a rational distribution of material production on the territory results in a waste in the processing of raw materials and in the rational use of fuels; it generally leads to uneconomical transport, to the increase in the average distance of transport of raw materials, fuel and finite products; makes difficult the organization of the specialization of industrial enterprises and of the cooperation among them, reduces the economic efficiency of the enterprises, compared with the real possibilities existing in the economy.

d) The spontaneous, irrational location of the industrial units creates difficulties in the organization of some best territorial relations between industry and agriculture, leads in many cases to an irrational use of agricultural areas, to the impossibility of dividing cultures into zones corresponding to favourable pedo-climatic conditions. Naturally that such a location of industry diminishes the economic efficiency of agriculture, compells the producers to cultivate in unfavourable ecological zones the cultures required by the irrationally located industrial processing units.

e) The spontaneous territorial distribution of the forces of production leads to the irrational development of towns, to the creation of overcrowded centres and to large areas lacking possibilities of work. At the same time it causes difficulties also in the field of town planning,

and elevating them from the town planning and sanitary point of view.

8.a) On the eve of World War II, all these negative influences of an irrational territorial distribution of the forces of production could be met in Rumania.

b) Rumania's economy in this period of time was characterized by its backwardness, Industry was poorly developed, the rich natural resources of the country being entirely unsatisfactorily turned to good account. Agriculture, the predominant activity in the country, was characterized by the backward character of the means of work which it utilized, and by the persistance of some powerful feudal remnants.

c). The weak development of industry and the backwardness of agriculture caused the low living standard of the majority of the population.

d) In 1938, the greatest part of the industrial output of Rumania was concentrated in only six industrial districts.

e) The main districts and knots of concentration of Rumania's industry in 1938 were the following:

- in % -

	The specific weight of industrial districts		
	Value of industrial output	Installed power	Number of employees
i) Bucharest - Ploieşti Prahova Valley	33.3	37.0	24.2
ii) Centre of Transylvania (Braşov, Sibiu, Mediaş, Turda, Cluj)	10.6	10.8	9.6
iii) South Western part of the country (Hunedoara, Arad, Timişoara, Reşiţa)	15.3	15.8	16.5
iv) North Western part of the country (Baia Mare, Satul Mare)	2.1	1.5	2.2
v) Bacău - Bunuşi - Piatra Neamţ	2.8	2.8	3.5
vi) Galaţi - Brăila	3.4	3.0	4.0
vii) T O T A L	67.5	71.9	60.0

f) In addition to these districts and knots of industrial concentration, in the rest of the country's territory, industry was represented by small factories and workshops in which manual work prevailed and whose main aim was the production of some consumer goods for local requirements (mills, oil pressing machines, small units of the food industry, small tanneries, lime kilns, quarries, small repaire workshops, etc.). Large regions such as Oltenia, Moldavia, Dobrogea, which possessed considerable and varied natural riches and a great

potential of labour force remained in a state of economic backwardness. The value of the overall production per inhabitant in Moldavia, Dobrogea and Oltenia was approximately 42 per cent of the average of this value for the whole country. The living standard of the population in these regions deprived of industry, of access roads, with a still more backward agriculture than in the rest of the country, was characterized by chronic mal-nutrition of the majority of the population, especially of the rural one, and the social and mal-nutrition diseases such as : tuberculosis, pellagra, etc.played havoc among a great part of the population.

i) According to the data of the 1930 census, out of the total number of industrial enterprises in Oltenia only 14 per cent had motive power, 94 per cent had up to 5 workers and only 6 enterprises grouped in 3 towns - Craiova, Turnu Severin and Tîrgu Jiu had over 200 workers. Out of the 20 administrative districts, in 15 there were no industrial enterprises except some primitive mills.

ii) In the historic province of Moldavia, except for some bigger industrial enterprises, grouped in the localities of Bacău, Buhuşi - Piatra Neamţ, the rest of industry was represented by mills, oil pressing machines and some enterprises of the food and light industry equipped with rudimentary technique. The situation of this historic region was still more aggravated as a consequence of the destructions caused by World War II.

iii) In Dobrogea region, utterly backward from the economic and cultural point of view, industry was represented only by small factories of local importance, agriculture was more backward than in any other part of the country, and over 40 per cent of the population of this region was illiterate.

g) In their turn the districts of industrial concentration did not represent a rational territorial organization of the industrial production. In fact they were a more or less accidental agglomeration of some industrial units unlinked among them from an economic point of view. The industrial enterprises were not specialized, generally they produced a great diversity of products, and the cooperation among them was practically non-existent.

h) In agriculture, the existence of big landlord propriety concurrently with the splitting of peasant agricultural property, the backward agro-technique, the disparity between industrial and agricultural prices, etc. were as many obstacles for the growth of agricultural output and of a scientific division into zones of vegetal and animal production.

i) In large zones with big agricultural resources, Oltenia, Moldavia, Bărăgan, there were no processing enterprises which should turn to account the agricultural produce and through this to stimulate the growth of agricultural production.

k) Pre-war Rumania had no efficacious instrument for remedying the regional desequilibriums in the distribution of the forces of production. The administrative restrictions were confined to influencing only to a certain extent the location of industry in the populated centres, having no effect on its regional repartition. Even within the populated centres, the restrictively administrative methods proved their inefficiency, to a great extent. Noxious industries were situated in the middle of districts; the industrial zones were not delimited in any of the towns of pre-war Rumania.

9. The possibility of fundamentally solving the problems linked with the territorial distribution of the material production, has appeared in Rumania together with the creation of the conditions for the passing to the

planned development of the economy. Considerable funds were invested for the economic development of the regions backward in the past, for the building and commissioning of industrial objectives, for the expansion of the technical material basis of agriculture. At the same time, an important number of social cultural institutions has been built.

10.a) Thus, 120 new industrial enterprises were built and commissioned, and the production capacities of another 60 enterprises were considerably extended in the regions of Moldavia, Oltenia and Dobrogea, between 1948 and 1960.

b) New industrial branches, unknown in the past have been created on the territory of these regions. Hydro and thermo-power stations have been built, as well as steel and machine building works, works and factories of the chemical industry, the food and light industries have been modernized, the natural riches of these regions, oil, timber, etc., are being turned to good account in new industrial constructions endowed with new technique.

c) This enabled the rapid increase of the production of these regions, at a rate superior to the country average rate. Thus, in 1960 the industrial output of Moldavia was 3.7 times and of Oltenia and Dobrogea 4.7 times bigger than in 1950, while all over the country, the production went up 3.6 times in the same period of time.

11. The principles of the rational territorial distribution of the forces of production are being constantly applied in the development of the national economy and as part of it, of the economy of the regions.

12. The main method of achieving them is the planned territorial distribution of investments. In this way, the development at a higher rate of the economy of the formerly backward regions is ensured, as well as the raising of the technical level of production in all regions of the country and the setting up of territorial complexes of production rationally organized and with an increased economic efficiency.

13. As a result of the planned distribution of investments on the territory, an economic, social and cultural impetus of all the country's regions was ensured.

The Dynamics of the Overall Production

in the years 1955-1960

1950 = 100

	1955	1960	Annual average rate of increase 1951 - 1960 percentages
1	2	3	4
a) Rumanian People's Republic	215	369	13.9
b) Argeş Region	221	383	14.4
c) Bacău Region	219	398	14,8

d) Banat Region	185	293	11,4
e) Braşov Region	256	461	16,5
f) Bucharest Region	211	333	13.8
g) Cluj Region	204	316	12.2
h) Crisana Region	260	369	14.0
i) Dobrogea Region	275	491	17.2
j) Galati Region	200	365	13.8
k) Hunedoara Region	190	375	14.2
l) Jassy Region	255	487	18.2
m) Maramureş Region	215	420	15.4
n) Mureş Magyar Autonomous Region	245	454	16.3
o) Oltenia Region	229	436	15.9
p) Ploieşti Region	197	291	11.3
r) Suceava Region	188	260	10.0
s) Town of Bucharest	219	384	14.4
t) Town of Constanţa	226	411	15.2

14. As this table shows, in most of the regions formerly backward from the economic point of view such as: Argeş, Bacău, Crişana, Dobrogea, Jassy, Maramureş, Mureş Magyar Autonomous Region, Oltenia, the industrial production increased in the period 1951 - 1960 at a superior rate compared with the average rate all over the country. The unequal rates are the very consequence of the application of the policy of raising the regions in the past underdeveloped from the economic point of view.

15. As a consequence of the changes in the territorial distribution of industry, new districts, knots and industrial centres have been created, and the old industrial groups have been consolidated and received a more rational content.

16. As a consequence of the industrial development, the urban population increased from 3,713,139 inhabitants in 1948 to 6,030,366 inhabitants on July 1st, 1961. The considerable increase of the urban population brought about the necessity of developing the towns, so that town planning programmes have been worked out for a period of 15 to 20 years for each town.

17.a) The transformations which have occurred in the territorial distribution of the forces of production during the socialist industrialization have turned into life the principles of economic policy in this field. At the same time we must stress that - in concordance with these principles - the transformations are the result of some concrete analyses on the territory regarding the economic efficiency of the location of each objective. In this way the concrete locations of industrial objectives in regions and on localities, made on the basis of technical and economic studies are combined and give life to the requirements of many-sided development of the economies of the regions, playing in their turn a constituent role in the proportional development of the national economy as a whole. Although the problem of the

content of these technical and economic studies of location surpasses the the subject of the present paper, we cannot but mention that in our opinion, the analyses must go from the determination of the locality - taking into account the nature and place of the raw material, the electric power sources, labour force means of communication, market, the requirement of grouping the industrial enterprises depending on the production relations among them etc. - to the location of the enterprise in the town planning programme of the respective locality - this time taking into account the delimitation of the industrial zones, the use in common by several enterprises of some facilities of communal, social and cultural administration.

b) An eloquent example in this respect is the building of the new town of Onești, in the Bacău region, and of the industrial complex in that locality. The industrial complex is based on the superior - chemical - turning to account of oil and oil products. It is made up of a modern oil refinery, the chemical works and a power centre of thermofication. Certain products of the oil refinery are further being processed into synthetic rubber, insecticides, fungicides, herbicides, and other chemical products. The power centre of thermofication supplies the necessary quantity of steam and hot water for the whole complex and for the newly built residential quarters and at the same time it is integrated in the national power system.

18. An important role in the creation of conditions for securing a correct distribution of the forces of production on the territory of the Rumanian People's Republic has been and is played by long term planning. Considering the fact that in general lines, sensible modifications in the territorial proportions cannot be achieved from one year to another, the five-year plans, the six-year economic plan, and the ten-year electrification plan, have placed at larger periods the systematic achievement of a series of measures which, being applied, have permitted the continous improvement of the territorial distribution of the forces of production in the Rumanian People's Republic. Continuing this policy, on the basis of the results obtained so far, the general long term plan (1960 - 1980) marks a new stage during which the territorial distribution of production and of the forces of production will permit an ever more rational content. In conformity with the objectives fixed in the long-term plan, the following criteria of locating the forces of production on the territory have been established in the six-year economic plan (1960-1965):

a) the achievement of the maximum economic efficiency by the use of the favourable economic and natural conditions of each region;

b) the further economic rise of the less developed regions;

c) the creation of an industrial basis in the still weakly industrialized towns;

d) the judicious use of the labour force in all regions of the country.

19. In determining the new industrial constructions on localities, one takes into account the necessity of using the existing spaces and which are more rationaly used from the economic point of view, the requirements of grouping enterprises for the use in common of some installations, administrative, social and cultural constructions, the necessity that the new industrial enterprises, big consumers of thermic energy should be generally built in the neighbourhood of power centres of thermofication, etc. Thus important savings of investments are achieved, as well as the reduction of the production expenses.

20.a) Planning the national economy and permanently following an ade-

quate proportionality in the structure on branches of the industrial production as well as in the territorial distribution, as well as the achievement of other fundamental proportions such as : the proportion between production and consumption, between consumption and accumulation, between the material and the financial means, etc. Rumania has obtained remarkable results in the development of her national economy on a continuously ascending line.

b) Summing up the results obtained, the main indicators of the development of economy show an over 1.6 times increase in the number of employees in 1961 compared with 1950, the growth of the fixed funds by over 1.7 times,of the volume of investments by over 5.2 times,of the social produce by nearly 2.9 times, of the national income by 3 times, of the overall industrial output by 4 times, of the overall agricultural production by 1.8 times. Reflecting the preoccupation for the continuous increase in the material and cultural level of the population, in the same period of time the real wages went up twice, the state's expenditure for social and cultural actions 5 times, the volume of the sale of goods through the socialist trade raised nearly 5 times in 1961 compared with 1949.

c) Illiteracy was liquidated already in the years of the five-year plan 1951 - 1955, the number of pupils in the general culture education increased by over 1,200,000 in the year 1961 - 1962, of the students over three times compared with the school year 1938 - 1939. The generalization of the 7-year compulsory education has been achieved and we have passed on the generalization of 8-year education. The entire education, beginning with the elementary school and up to university education, is free of charge.

d) General death rate decreased from 19.1 per cent in 1938 to 8.7 per cent in 1961, and infantile mortality from 17.9 per cent in the same period to 6.9 per cent.

21. We have mentioned the afore-said results not because they are not known, but in order to underline that we consider that their achievement is also conditioned in its turn by the policy of rational territorial distribution of the forces of production; this permitted the attraction of all regions of the country in a complex economic, social and cultural development during the socialist industrialization, in other words it created pre-requisites so that each region should be able to turn to good account the material and labour resources it possessed, thus making its contribution to the general impetus of the national economy and at the same time profiting by it. The many-sided development of the regions in the process of industrialization increases social labour productivity, raises the level of qualification, creates new occupations, which are reflected in the growth of the living standard. All this seems to us to represent an essential aspect of each policy of industrialization conceived not like a mere increase in the output of some products or others, but as a key factor of the economic, social and cultural progress of the entire people in a country which is developing.

1399 E - Nov.1962 - 1,600